EKE

EDRN Knowledge System

Sean Kelly

Overview

Goal: One stop shopping
EKE
Importing knowledge
Information views
Where to next
Summary

why the portal?

“EDRN”

Google™

EDRN — EDRN

http://edrn.nci.nih.gov/

Google

PB HP JM TV +DVD Timer del.icio.us

NATIONAL CANCER INSTITUTE

Early Detection Research Network

Home | About EDRN | EDRN Investigators | Committees | Organ Groups | Resources | Publications

You are here: Home

- Calendar
- Division of Cancer Prevention
- Cancer Biomarkers Research Group
- EDRN Protocols
- Funding Opportunities
- EDRN Bookshelf

Need Help?
Contact us by phone, Web, and email
1-800-4-CANCER

Research and development of biomarkers and technologies for the clinical application of early cancer detection strategies

Announcement 04/05/2007

The Division of Cancer Prevention at NCI invites EDRN members to attend the NCI Workshop on Cancer Stem Cells as Targets for Cancer Prevention and Early Detection from May 14–15, 2007, in Bethesda, MD. For more information, click here.

Click below for the announcement of the NCI Early Detection Research Network (EDRN) Program for Rapid, Independent Diagnostic Evaluation (PRIDE) for Cancer Biomarkers
Notice Number: NOT-CA-07-003

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[Archives]

Welcome to the EDRN! The Early Detection Research Network (EDRN), an initiative of the National Cancer Institute (NCI), brings together dozens of institutions to help accelerate the translation of biomarker information into clinical applications and to evaluate new ways of testing cancer in its earliest stages and for cancer risk.

- Scientific Components
- For Public, Patients, and Advocates
- Collaborative Opportunities
- For Researchers

Plone

ZOPE

web apps

extremely rapid

fluid interactions
attractive
robust security
accessible
unified look and feel

easier than falling off a bike

EDRN Knowledge Environment

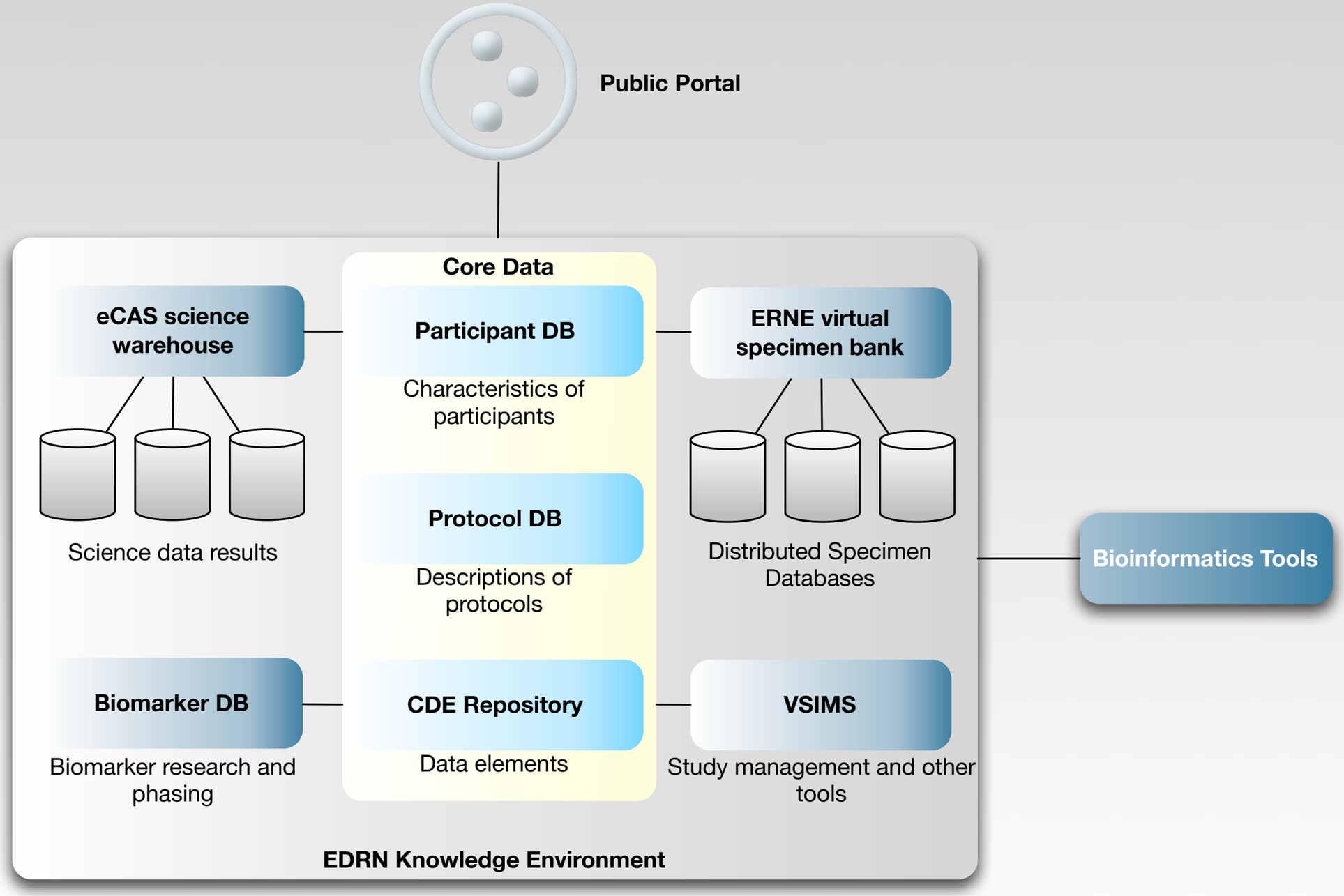
EKE

browse and search only

intent

flip the “switch”

full fledged
read/write
workflow-enabled
process-driven
annotation-ready
Google-maps–integrated
community contented
Web 2.0™
web application


Public Portal
Core Data
eCAS science warehouse
Participant DB
ERNE virtual specimen bank
Characteristics of participants
Science data results
Protocol DB
Descriptions of protocols
Distributed Specimen Databases
Bioinformatics Tools
Biomarker DB
CDE Repository
VSIMS
Biomarker research and phasing
Data elements
Study management and other tools
EDRN Knowledge Environment

send collective knowledge

ingest in portal

display in parallel applications

Biomarker Database

tracks progress of biomarker development
relates biomarkers to protocols, publications, other resources

ECAS

repository of EDRN science data
intense metadata per-product
product versioning

ERNE

portal-level view of virtual specimen bank
may provide summary or detailed views
may provide public or protected access

import from other tools

VSIMS
ESIS
caTissue Core
caBIG
flickr
MySpace
Facebook
Craigslist
etc.

importing knowledge

Resource Description Format

W3C
XML
URI (URL & URN)
deep brain thoughts

describe any resource

beers

tattooists

payments

cats

web pages

specimens

people

data sets

beers

buildings

tattooists

retailers

bank accounts

spacecraft

crops

machine readable

correlate
interchange
search
discover
navigate
classify
catalog

data
information
knowledge

better serve humankind

or ultimately subjugate us

EDRN knowledge → RDF

navigable
searchable
knowledge system

knowledge model

ontology

the morphology of EDRN's data, information, knowledge

theory & practice

EDRN ontology

ideal information model

implementation constrained

practical
but not ideal

RDF schema for implementation purposes

working on it

knowledge in flux

ontology must adapt

practical model

fluid implementation

cannot rely on non-agile technologies or methods

information views

development

application-specific
application-neutral

application-specific

parallel applications

parallel versions

Biomarker Database
ECAS
ERNE

why?

information model insufficient

dynamic relationships

between information entities

(OWL)

leverage Agile OODT

http://agility.jpl.nasa.gov/

dynamic
Biomarker Database

prototype
ERNE

ECAS

application-neutral

free-form knowledge

navigable
searchable

RDF browser

bonus:
live annotation

next steps

freeze ontology

generate practical RDF schema

release 1.0.0

continue EKE parallel apps

specify import format
for external applications

deploy to Public Portal

go live!

Summary

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